

AMENDMENTS TO THE SPECIFICATION

1. Please replace the original paragraph beginning on page 9, line 13 and ending on page 9, line 21 with the following amended paragraph, which includes markings to show the proposed changes:

When the motor 128 is running, air is drawn into the compressor 118 through air supply conduit 120 and dispersed into the water column through outlet conduit 124. At the same time, aerated water is drawn into the pump 110 through screened inlet region ~~112~~116 and is delivered to the storage tank 18 by way of water supply conduit 114. During this period of operation, the radon within the water column is diffused into a gaseous state, causing the harmful gas to exit the well casing 14 through the vent 22 in well cap 16. In addition, the dissolved solids in the water column are oxidized, causing these impurities to precipitate out of solution and fall to the bottom of the well. It is envisioned that vent 22 can include a check valve or similar mechanism to prevent water and debris from entering the well.

2. Please replace the original paragraph beginning on page 10, line 10 and ending on page 11, line 4 with the following amended paragraph, which includes markings to show the proposed changes:

Aeration device 200 also includes an aerating section consisting of a secondary water pump 240 of suitable horsepower. The secondary water pump 240 draws well water through a screened inlet 242 and conveys the water to a venturi tube assembly 244 by way of a water supply conduit 246. The venturi tube assembly 244, which is best seen in Fig. 3, operates in accordance with the principles of Bernoulli's Law. Thus, as pressurized water from the secondary pump 240 is urged through the inlet 244a of venturi assembly 244 at a given velocity and flow rate, air is drawn under pressure into the venturi assembly 244 through an air supply conduit 220. The air supply conduit 220 extends through the vented well cap 16 and communicates with an inlet tube 222122. The air and water drawn into the venturi assembly 244 mix together, and the aerated water is then discharged from the outlet 244b of venturi assembly 244 through a discharge conduit 248. The exit port of the discharge conduit 246 is located a small distance above the primary pump 210 to ensure that the well water drawn into the primary pump 210 for delivery to the storage tank is effectively aerated. Those skilled in the art will readily appreciate that the configuration of the venturi assembly and the flow parameters of the fluid supplied thereto by the secondary pump can be optimized to achieve the most effective and efficient aeration and pumping conditions for the system.

3. Please replace the original paragraph beginning on page 12, line 9 and ending on page 12, line 21 with the following amended paragraph, which includes markings to show the proposed changes:

Aeration device 300 also includes an aerating section consisting of a secondary water pump 340 of suitable horsepower. As best seen in Fig. 5, well water is drawn into the impeller stages of the secondary pump 340 through a first inlet port 342. Secondary pump section 340 has a second inlet port 344, which communicates with an air supply conduit 320 that extends through the vented well cap 16 and communicates with an inlet tube 322122 at the surface. As water is drawn into the secondary pump 340 through inlet port 342, the suction created by the impeller stage draws air into the secondary pump 340 from supply conduit 320 through check valve 325. The air and water are mixed together within the secondary pump 340, and the aerated water is then discharged into the water column of the well through an outlet conduit 324, as illustrated in Fig. 4. The exit port of outlet conduit 324 is preferably located a small distance above the primary pump 310 to ensure that aerated water is always drawn into the primary pump 310. An air diffuser 326 may be fit at the exit port to enhance aeration, as shown for example in Fig. 4.

4. Please replace the original paragraph beginning on page 13, line 6 and ending on page 13, line 13 with the following amended paragraph, which includes markings to show the proposed changes:

As in each of the previous embodiments of the subject invention, a motor 328 is positioned below the secondary pump 340 of aeration device 300, and is operatively connected to the primary and secondary water pumps 310, 340 for operating both simultaneously. Motor 328 is operatively connected to a conventional pressure switch through wiring conduit 330. The pressure switch functions to start the motor 228328, and hence the primary and secondary pumps 310, 340, when the pressure within the storage tank drops to a certain level, and subsequently stops the motor 228-328 and the pumps 310, 340 when the pressure within the storage tank returns to a preset level.

5. Please replace the original paragraph beginning on page 13, line 14 and ending on page 13, line 17 with the following amended paragraph, which includes markings to show the proposed changes:

Although the device of the subject invention have-has been described with respect to preferred embodiments, those skilled in the art will readily appreciate that changes and modifications may be made thereto without departing from the spirit and scope of the subject invention as defined by the appended claims.